CLAIMS

1. A transdermal drug delivery system for treatment of ophthalmic diseases comprising a structure that a plaster layer containing a remedy for ophthalmic diseases is provided on a support, wherein the system is applied to a skin surface including a front surface of an eyelid to administer the remedy for ophthalmic diseases in the plaster layer to an ophthalmic topical tissue by percutaneous permeation substantially without being administered through a systemic blood flow.

2. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 1, wherein the remedy for ophthalmic diseases is an antiviral agent, antibacterial agent, anti-mycotic agent, antiallergic agent, anti-inflammatory agent, nonsteroidal anti-inflammatory agent, anti-inflammatory-analgesic agent, anti-inflammatory enzymatic agent, antibiotic, sulfa agent, synthetic penicillin, remedy for glaucoma, remedy for cataract, miotic, mydriatic, topical astringent, vasopressor, preventive for rise in ocular tension, remedy for ocular hypertension, surface anesthetic, α1-blocker, β-blocker, β1-blocker, carbonic anhydrase inhibitor, topical selective H1-blocker, adrenal cortical hormone, vitamin B12, coenzyme type vitamin B2, anticholinesterase agent or organic iodine preparation.

3. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 2, wherein the remedy for ophthalmic diseases is an antibacterial agent, antiallergic agent or nonsteroidal anti-inflammatory agent.

4. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 2, wherein the remedy for ophthalmic diseases is a compound having a molecular weight of at most 1,000.

5. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 1, wherein the remedy for ophthalmic diseases is an antibacterial agent, antiallergic agent or nonsteroidal anti-inflammatory agent having a molecular weight of at most 1,000.

6. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 5, wherein the remedy for ophthalmic diseases is ketotifen fumarate or diclofenac sodium.

7. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 1, wherein the plaster layer containing the remedy for ophthalmic diseases is a pressure-sensitive adhesive layer

containing the remedy for ophthalmic diseases.

8. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 7, wherein the pressure-sensitive adhesive layer is a pressure-sensitive adhesive layer formed of a rubber-based pressure-sensitive adhesive, acrylic pressure-sensitive adhesive or silicone-based pressure-sensitive adhesive.

9. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 8, wherein the rubber-based pressure-sensitive adhesive comprises a styrene-isoprene-styrene block copolymer as a pressure-sensitive adhesive base.

10. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 8, wherein the acrylic pressure-sensitive adhesive is a (co)polymer of at least one alkyl (meth)acrylate, or a copolymer of an alkyl (meth)acrylate and a functional monomer or vinyl ester monomer copolymerizable with this ester or both monomers.

11. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 8, wherein the pressure-sensitive adhesive layer contains a percutaneous absorption enhancer.

12. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 11, wherein the percutaneous absorption enhancer is an aliphatic alcohol, fatty acid, fatty acid ester, alcohol amine, polyhydric alcohol alkyl ether, polyoxyethylene alkyl ether, glyceride, middle-chain fatty acid ester of a polyhydric alcohol, lactic acid alkyl ester, dibasic acid alkyl ester, acylated amino acid, pyrrolidone or its derivative. lactic acid, tartaric acid, 1,2,6-hexanetriol, benzyl alcohol, lanoline, potassium hydroxide (KOH), tris(hydroxymethyl)aminomethane, or a mixture of 2 or more compounds thereof.

13. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 11, wherein the percutaneous absorption enhancer is an aliphatic higher alcohol, fatty acid, alcohol amine, fatty acid ester, polyoxyethylene alkyl ether, KOH, tris(hydroxymethyl)aminomethane, or a mixture of two or more compounds thereof.

14. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 8, wherein the pressure-sensitive adhesive layer is a rubber-based pressure-sensitive adhesive layer containing 100 parts by weight of the styrene-isoprene-styrene block copolymer, 10 to 400 parts by weight of a tackifier, 1 to

50 parts by weight of the percutaneous absorption enhancer and 0.1 to 60 parts by weight of the remedy for ophthalmic diseases.

15. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 8, wherein the pressure-sensitive adhesive layer is an acrylic pressure-sensitive adhesive layer containing 100 parts by weight of the acrylic (co)polymer, 1 to 50 parts by weight of the percutaneous absorption enhancer and 0.1 to 60 parts by weight of the remedy for ophthalmic diseases.

16. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 1, which has a form capable of being applied along a skin surface including the front surface of an upper eyelid, a lower eyelid or both eyelids.

17. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 1, which can transfer the remedy for ophthalmic diseases in the plaster layer to an ophthalmic topical tissue under application by percutaneous permeation substantially without being administered through a systemic blood flow.

18. The transdermal drug delivery system for treatment of ophthalmic diseases according to claim 1,

wherein when the system is applied to the skin surface including the front surface of the eyelid, the amount (unit: μg/g·tissue) of the remedy transferred to an external ophthalmic tissue under the application within 8 hours after the application amounts to at least twice as much as the amount of the remedy transferred to the external ophthalmic tissue through a systemic blood flow.

19. Use of a transdermal drug delivery system for treatment of ophthalmic diseases having a structure that a plaster layer containing a remedy for ophthalmic diseases is provided on a support, comprising applying the transdermal drug delivery system to a skin surface including a front surface of an eyelid to transfer the remedy for ophthalmic diseases in the plaster layer to an ophthalmic topical tissue by percutaneous permeation substantially without being administered through a systemic blood flow.

20. A method for transferring a remedy for ophthalmic diseases to an ophthalmic topical tissue, comprising applying a transdermal drug delivery system for treatment of ophthalmic diseases having a structure that a plaster layer containing the remedy for ophthalmic diseases is provided on a support to a skin surface including a front surface of an eyelid to transfer the remedy for ophthalmic diseases in the plaster layer to the ophthalmic

topical tissue by percutaneous permeation substantially without being administered through a systemic blood flow.